UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,994	07/21/2003	Graham A. Wheeler	30835/303114	5501

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EXAMINER
TO, BAOTRAN N

ART UNIT	PAPER NUMBER
2135	

MAIL DATE	DELIVERY MODE
04/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/623,994	WHEELER, GRAHAM A.
Office Action Summary	Examiner	Art Unit	
	Baotran N. To	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _01/25/2008 (RCE)_.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1,2,4-8,19-24 and 26-30_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1,2,4-8,19-24 and 26-30_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _7/21/03; 9/15/03; 1/28/05; 3/28/05; 5/31/05_.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37

CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for

continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been

timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR

1.114. Applicant's submission filed on 01/25/2008 has been entered.

This Office action is responsive to the Applicant's Amendment filed 12/21/2007.

Claims 1, 4-8, 19-21, 23-24, and 26-30 are amended.

Claims 3, 9-18, 25 and 31-38 are canceled.

Claims 1-2, 4-8, 19-24, and 26-30 remain for examination.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-2, 4-8, 19-24, and 26-30 have been

considered but are moot in view of the new ground(s) of rejection.

Applicant argues, "Yeager [0017] [0019] and [0164] do discuss generating keys, however,

Yeager does not disclose domains and the relationship of the levels of domains associated with

the generated first and next cryptographic keys. Hierarchical namespaces are not discussed by

Yeager" (Page 9 of Remarks).

Examiner respectfully disagrees with this argument. Yeager explicitly discloses generating

one or more cryptographic keys (i.e., public keys) associated with a namespace (i.e., peer, URIs)

(paragraphs 0017, 0019 and 0164); and creating an authority (i.e., peer identity, UUID) using one

of the cryptographic keys (paragraph 0162). Furthermore, Yeager discloses "A peer may belong

to two or more different peer groups each implementing a different security model on different

levels of the trust spectrum. In a trust spectrum, unique peer identities may be established to

enable authentication and the assignment of the peers' associated access policies within a peer

group, e.g., authentication and authorization. In one embodiment, the trust spectrum may have

Certificate Authority signed certificates at or near one endpoint as a maximum level of security,

and self-signed certificates at or near the other as a minimum level of security" (Paragraph 0019).

Information Disclosure Statement

3.   The information disclosure statement (IDS) submitted on 7/21/03, 9/15/03, 1/28/05,

3/28/05, and 5/31/05. The submission is in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1-8 and 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Yeager et al. (U.S. Patent Application Publication 2003/0070070 A1) hereinafter Yeager in view

of Ajmani et al. "ConChord: Cooperative SDSI Certificate Storage and Name Resolution" listed in

IDS filed on 09/15/03 hereinafter Ajmani.

Regarding Claims 1 and 23, Yeager discloses a method of using a peer-to-peer type resolution to enable a secured, hierarchical lookup between connected devices (Figures 1A and 1B), the method comprising:

generating one or more first cryptographic keys (i.e., public keys) associated with a namespace (i.e., peer, URIs) (paragraphs 0017, 0019 and 0164);

creating a first authority (i.e., peer identity, UUID) using one of the one or more first cryptographic keys (paragraph 0162);

generating one or more next cryptographic keys (i.e. public key) associated with a next higher-level namespace (i.e., peer, CA), the next higher-level namespace at a higher level domain than the first namespace (paragraphs 0162, 0164, and 0203);

creating next higher-level authority using one of the one or more next cryptographic keys (paragraphs 0017, 0019-0020); and

Yeager does not disclose " publishing, using the peer-to-peer type resolution, an association between the first and the next higher-level namespaces, the association comprising: a signed resolution that resolves a name to the first authority, the signed resolution signed with the one of the one or more next cryptographic keys and the name including the next higher-level authority and the first namespace."

However, Ajmani expressly discloses the association comprising: publishing, using the peer-to-peer type resolution, an association between the first and the next higher-level namespaces a signed resolution that resolves a name to the first authority, the signed resolution signed with the one of the one or more next cryptographic keys and the name including the next higher-level authority and the first namespace (Name Resolution, Page 3 and Section 3.2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Ajmani's teaching within Yeager to include publishing, using the peer-to-peer type resolution, an association between the first and the next higher-level namespaces, the association comprising: a signed resolution that resolves a name to the first authority, the signed resolution signed with the one of the one or more next cryptographic keys and the name including the next higher-level authority and the first namespace. One of ordinary skill in the art would have been motivated to do so because it would define local namespaces and link them to delegate trust (Ajmani, Abstract).

Regarding Claims 2 and 24, Yeager and Ajmani disclose the limitations of Claims and 23 above. Yeager further discloses wherein the connected devices are part of a peer-to-peer network cloud (Figures 1A, 1B, 2A, and 2B).

Regarding Claims 4 and 26, Yeager and Ajmani disclose the limitations of Claims and 23 above. Yeager further discloses if the first namespace comprise a service, publishing a second association, the second association comprising a signed service resolution that resolves the first authority to an end result that provides data, the signed service resolution signed with the one of the one or more first cryptographic keys (paragraphs 0233-0234 and Ajmani, Page 1).

Regarding Claims 5 and 27, Yeager and Ajmani disclose the limitations of Claims and 23 above. Yeager further discloses if the first namespace comprise a service, publishing a second association, the second association comprising a signed service resolution that resolves the first authority to an IP address, a protocol name and a port, the signed service resolution signed with the one of the one or more first cryptographic keys (paragraph 0199 and Ajmani, Page 1).

Regarding Claims 6 and 28, Yeager and Ajmani disclose the limitations of Claims and 23 above. Yeager further discloses supporting a dynamic change of address of the first namespace from an initial to a new address via delegating authority, comprising publishing, using the peer-peer type resolution, a new association between the new address and the first namespace, the new association comprising a signed new resolution that resolves the first authority to the new address, the signed new resolution sighed with the one of the one or more first cryptographic keys (paragraphs 0203 and 0311 and Ajmani, Page 1).

Regarding Claims 7 and 29, Yeager and Ajmani disclose the limitations of Claims and 23 above. Yeager further discloses wherein the signed resolution resolves the name to one of the group: a host and a service (paragraph 0372).

Regarding Claims 8 and 30, Yeager and Ajmani disclose the limitations of Claims and 23 above. Yeager further discloses wherein creating the first authority includes performing a first hash of the one of the one or more first cryptographic keys, the one of the one or more first cryptographic keys being a first public key from a first private key-public key pair, and wherein creating the next higher-level authority includes performing a next hash of the one of the one or more next cryptographic keys, the one of the one or more next cryptographic keys being a next public key from a next private key-public key pair (paragraphs 0017, 0019, 1062 and 0164).

Regarding Claim 19, Yeager discloses a method of generating a data structure for implementing a name resolution protocol, comprising:

generating a first field comprising a first authority component (i.e., CA) associated with a first public key (i.e., public keys), the first public key being part of a first private key-public key pair

and the first authority component corresponding to a first namespace (paragraphs 0017 and 0162); and

generating a second field comprising a second name component (peer to peer associated with a second namespace (i.e., peer, URIs) the second namespace corresponding to a second authority and a domain of the second namespace at a lower level than a domain of the first namespace, wherein the authority component and the name component are capable of resolving to the second authority (paragraphs 0017 and 0164), and

Yeager does not disclose "providing the generated data structure to the name resolution protocol for publishing a resolution that resolves the first authority component and the second name component to the second authority."

However, Ajmani expressly discloses providing the generated data structure to the name resolution protocol for publishing a resolution that resolves the first authority component and the second name component to the second authority (Name Resolution, Page 3 and Section 3.2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Ajmani's teaching within Yeager to include providing the generated data structure to the name resolution protocol for publishing a resolution that resolves the first authority component and the second name component to the second authority. One of ordinary skill in the art would have been motivated to do so because it would define local namespaces and link them to delegate trust (Ajmani, Abstract).

Regarding Claim 20, Yeager and Ajmani disclose the limitations of Claim 19 above. Yeager further discloses if the second namespace is a service, providing the second authority component to the name resolution protocol for publishing a second resolution that resolves the

second authority to a port number, protocol name, and IP address (Yeager, paragraph 0199 and Ajmani, Page 1).

Regarding Claim 21, Yeager and Ajmani disclose the limitations of Claim 19 above. Yeager further discloses wherein if the first namespace is a first host, the first authority component and the second name component are capable of resolving to a second host corresponding the second authority (paragraph 0372 and Ajmani, Page 3).

Regarding Claim 22, Yeager and Ajmani disclose the limitations of Claim 19 above. Yeager further discloses retrieving one or more from the group an IP address, a protocol name, and a port number from a cache (paragraphs 0219, 0233 and 0315).

Contact Information

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baotran N. To whose telephone number is (571)272-8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. N. T./
Examiner, Art Unit 2135
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